

MONTANA DEPARTMENT OF FISH AND GAME  
FEDERAL AID IN FISH RESTORATION SECTION  
HELENA, MONTANA

JOB COMPLETION REPORT  
DEVELOPMENTS AND OPERATIONS

State of Montana

Project No.: F-24-D-34

Name: Statewide Lake and Stream Rehabilitation

Job No.: I

Title: Rehabilitation of Crandall Reservoir

Period Covered: September 1, 1960 -- December 31, 1960

Abstract:

Crandall Reservoir, a twenty acre stock pond in Roosevelt County, was treated with Pro-Nox Fish on October 11, 1960 to remove a population of various species of warm-water fish. Toxicant was applied at 2.0 ppm. A complete kill was probably attained. The reservoir will be managed for rainbow trout.

Objectives:

Crandall Reservoir is a twenty acre stockwater reservoir located about twelve miles north of Poplar, Roosevelt County, Montana. For a period of time the reservoir provided satisfactory angling for largemouth bass. In recent years angling quality had deteriorated. Test netting in July 1960 disclosed a population of various cyprinids, centrarchids, yellow perch and bullheads. The physical characteristics of the reservoir indicated that it could support a population of rainbow trout. In view of the rapid growth and the quality of angling afforded by this species in other small waters in Eastern Montana, it was decided to remove the existing population in order to establish trout in the reservoir.

Procedures Used:

A commercial emulsifiable rotenone preparation (Pro-Nox Fish) was applied by siphoning the toxicant from a boat into the prop-wash. Water volume was computed at 170 acre feet. Since the map used was made by rather crude methods (compass and pacing), the rate of application was set somewhat high to allow for considerable error. One hundred ten gallons of toxicant were applied, giving a concentration of 2.0 ppm.

Toxicant was applied on October 11, 1960. Some difficulty in distributing the toxicant was encountered in the weedy shoal areas. An inspection made by wading these areas on October 13 disclosed numerous dead fish among the vegetation. No live fish were noted. The eradication appeared to be successful.

A tank for carrying toxicant in a small boat and dispersing the toxicant was built on this project and will be available for future projects. The apparatus consists of a frame, constructed of 2 x 4 inch lumber held together with carriage bolts. The frame rests on the front and middle seats of a 12 foot boat and is made so that it is confined by the sides of the boat and the seats. The frame is provided with a cradle into which a steel barrel is fastened in a horizontal position with a chain and a light toggle load binder. The barrel is equipped with a faucet and discharge

hose on its small bung and a short standpipe on its large bung. The apparatus greatly aided in handling the toxicant without spillage.

Results:

Observations described above suggest that a complete kill was obtained. Rainbow trout will be introduced at state expense in 1961.

This does not complete the work described in the preliminary project statement.

Prepared by Cliff Hill

Approved by George D. Holton  
George D. Holton

Date December 30, 1960